(For students admitted in 2012-13 under the 3-year degree)

Curriculum for BSc in Mathematics - Applied Mathematics Option

General Requirements

Students are required to complete the following general requirements for graduation in addition to program specific requirements:

Required Courses in English Communication
Common Core Requirements
Required Course in Physical Education

For details please refer to the section "General Requirements" on this website.

Program Specific Requirements

Credit(s)

Required courses

	MATH 2021	Multivariable and Vector Calculus	4
	MATH 2031	Introduction to Real Analysis	4
	MATH 2121	Linear Algebra	4
	MATH 2352	Differential Equations	4
	MATH 2411	Applied Statistics	4
	MATH 3033	Real Analysis	4
	MATH 3312	Numerical Analysis	3
	MATH 4023	Complex Analysis	3
	MATH 4052	Partial Differential Equations	3
(1)	MATH 4326	Introduction to Fluid Dynamics	3
(2)	COMP 1022P	Introduction to Computing with Java	3

Elective courses

	Elective types		Minimum no. of courses	Minimum total credits
(3,5)	MATH	Mathematics Elective	2	6
(3)	PHYS	Physics Elective	1	3
(4,5)	FREE	Free Elective	5	15

Notes:

(1) The course can be replaced by MATH 4333, MATH 4351, MATH 4511, or MATH 4990 provided that enrolment quota of these courses is available.

(2) This course can be replaced by COMP 1004 (prior to 2013-14) provided that enrolment quota is available.

(3) PHYS 2411 is recommended; however, it may be replaced by another PHYS course of 2000-level or above except PHYS 2080, PHYS 3480 and PHYS 4080. Other recommended electives are determined by the specific concentration a student elects to follow. There are four concentrations: scientific computation, financial mathematics, atmospheric & astrophysical sciences, and mathematical biology.

(4) ISOM 2500 cannot be used to satisfy any FREE elective requirement.

(5) Unless otherwise approved by the Department, mathematics courses coded from 1000 to 1600 cannot be used to fulfill any MATH or FREE elective requirements.

For graduation, students are required to complete both the general requirements and requirements specified for the program, and to earn a minimum of 90 credits.